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EXAMINER	
YUN, EUGENE	

ART UNIT	PAPER NUMBER
2618	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	**Application No.** 10/684,918	**Applicant(s)** BI ET AL.	
	Examiner EUGENE YUN	**Art Unit** 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 February 2009*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-20 and 22-31* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *6-20 and 22-31* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 6-20 and 22-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esteves et al. (US 6,205,129) in view of Chheda et al. (US 7,542,769).

Referring to Claim 6, Esteves teaches a method of operating a mobile user device to gate reverse link transmissions, the method comprising:

Receiving a broadcast signal (see col. 10, lines 12-15);

Comparing a quality of the received broadcast signal to a quality threshold (see col. 11, lines 5-9); and

Determining whether the quality of the received broadcast signal exceeds the quality threshold (see col. 11, lines 5-9).

Esteves does not teach determining a gating rate based on the quality of the received broadcast signal, wherein the gating rate establishes a time period between reverse link communications;

communicating, to a network control element, an intent to gate at the gating rate;

receiving art acknowledgement, from the network control element, authorizing reverse link gating at the gating rate; and

transmitting reverse link communications at the gating rate responsive to receiving the acknowledgement.

Chheda teaches determining a gating rate based on the quality of the received broadcast signal, wherein the gating rate establishes a time period between reverse link communications (see col. 9, line 63 to col. 10, line 3);

communicating, to a network control element, an intent to gate at the gating rate (see col. 3, lines 34-41);

receiving an acknowledgement, from the network control element, authorizing reverse link gating at the gating rate; and transmitting reverse link communications at the gating rate responsive to receiving the acknowledgement (see col. 3, lines 41-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Chheda to said device of Esteves in order to balance the mobile station power savings of gating against the impact on system capacity.

Claim 27 has similar limitations as claim 6.

Referring to Claim 11, Esteves teaches a method for controlling reverse link transmissions in a wireless communication network that includes at least a network control element and at least one mobile user device (see col. 2, lines 31-36), the method comprising:

Determining, by the network control element, whether a parameter relating to broadcast transmission quality crosses a threshold (see col. 11, lines 5-8).

Esteves does not teach transmitting, by the network control element, a message to the at least one mobile user device, the message instructing the at least one mobile user device to start gating reverse link transmissions at a specified gating rate. Chheda teaches transmitting, by the network control element, a message to the at least one mobile user device, the message instructing the at least one mobile user device to start gating reverse link transmissions at a specified gating rate responsive to determining that the parameter has crossed the threshold (see col. 3, lines 34-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Chheda to said device of Esteves in order to balance the mobile station power savings of gating against the impact on system capacity.

Referring to Claim 22, Esteves teaches a network element comprising a controller operable to determine whether a parameter relating to broadcast transmission quality has crossed a threshold (see col. 11, lines 5-8). Esteves does not teach generating a message instructing a plurality of mobile user devices to start gating reverse link transmissions at a gating rate when the parameter has crossed the threshold; and

a transceiver coupled to the controller and operable to transmit the message to the plurality of mobile user devices.

Chheda teaches generating a message instructing a plurality of mobile user devices to start gating reverse link transmissions at a gating rate when the parameter has crossed the threshold (see col. 3, lines 34-49); and a transceiver coupled to the controller and operable to transmit the message to the plurality of mobile user devices (fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Chheda to said device of Esteves in order to balance the mobile station power savings of gating against the impact on system capacity.

Referring to Claim 25, Esteves teaches a method for controlling reverse link transmissions in a wireless communication network, the method comprising:

determining at least one of (a) a quantity of mobile user devices in a coverage area of a base station and (b) a variance in broadcast signal transmission power of the base station, to produce a monitored parameter (see col. 2, lines 31-36); and

determining whether the monitored parameter exceeds an associated threshold (see col. 11, lines 5-8).

Esteves does not teach sending a message to at least one mobile user device, the message instructing the at least one mobile user device to start gating reverse link transmissions at a gating rate responsive to determining that the monitored parameter exceeds the associated threshold. Chheda teaches sending a message to at least one mobile user device, the message instructing the at least one mobile user device to start gating reverse link transmissions at a gating rate responsive to determining that the monitored parameter exceeds the associated threshold (see col. 3, lines 34-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Chheda to said device of Esteves in order to balance the mobile station power savings of gating against the impact on system capacity.

Referring to Claim 26, Esteves teaches a wireless communication system comprising:

A base station (col. 2, line 31);

determining at least one of (a) a quantity of mobile user devices in a coverage area of a base station and (b) a variance in broadcast signal transmission power of the base station, to produce a monitored parameter (see col. 2, lines 31-36); and

determining whether the monitored parameter exceeds an associated threshold (see col. 11, lines 5-8).

Esteves does not teach sending a message to at least one mobile user device via the base station, the message instructing the at lease one mobile user device to start gating reverse link transmissions. Chheda teaches sending a message to at least one mobile user device via the base station, the message instructing the at lease one mobile user device to start gating reverse link transmissions (see col. 3, lines 34-49); and

A mobile user device located within the coverage area of the base station (fig. 1), the mobile user device including:

A mobile device transceiver operable to receive the message from the base station, and a mobile device controller coupled to the mobile device transceiver, the mobile device controller operable to gate reverse link transmissions as instructed in the message (see col. 3, lines 34-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Chheda to said device of Esteves in order to balance the mobile station power savings of gating against the impact on system capacity.

Referring to Claims 7 and 28, Esteves also teaches receiving the quality threshold from the network control element (see col. 11, lines 5-9).

Referring to Claims 8 and 29, Esteves also teaches determining whether the quality of the received broadcast signal exceeds the quality threshold for a first time period (see col. 11, lines 5-9).

Referring to Claims 9 and 31, Chheda also teaches receiving an action time at which reverse link gating is to commence (see col. 3, lines 34-49).

Referring to Claims 10 and 30, Esteves teaches determining whether the quality or the received broadcast signal falls below the quality threshold for a second time period (see col. 11, lines 5-8);

Transmitting, to the network control element an intent to change the gating rate to a new gating rate (see col. 2, lines 54-62);

Receiving, from the network control element, a new rate acknowledgement, including an action time; and transmitting reverse link communications at the new gating rate responsive to receiving the new rate acknowledgement (see col. 11, lines 10-22).

Chheda teaches the new gating rate being lower than the gating rate and resulting in a decreased time period between reverse link communications at which reverse link gating is to commence at the new gating rate (see col. 3, lines 34-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Chheda to said device of Esteves in order to balance the mobile station power savings of gating against the impact on system capacity.

Referring to Claims 12 and 23, Esteves also teaches determining whether the transmit power variability of the broadcast signal exceeds a threshold (see col. 11, lines 5-8).

Referring to Claims 13 and 24, Esteves also teaches determining whether the quantity of mobile user devices in the sector exceeds a threshold (see col. 11, lines 5-8).

Referring to Claim 14, Chheda also teaches broadcasting a signal to notify all mobile user devices in a sector to initiate gating reverse link transmissions at the specified gating rate (see col. 3, lines 34-49).

Referring to Claim 15, Esteves also teaches a gating start time (see col. 2, lines 28-36).

Referring to Claim 16, Esteves also teaches transmitting the message over a forward dedicated control channel of the at least one mobile user device (see col. 2, lines 54-62).

Referring to Claim 17, Esteves also teaches the message including an individual start time (see col. 2, lines 28-36).

Referring to Claim 18, Esteves also teaches mobiles near the edge of a cell of the wireless communication network less gated than mobile user devices located near a base station of the wireless communication network (see col. 2, lines 63-67 and col. 3, lines 1-6).

Referring to Claim 19, Esteves also teaches the number of power up requests from at least one mobile user device during a time period, and wherein the step of determining includes determining whether the number of power up requests is less than a threshold (see col. 6, lines 35-46).

Referring to Claim 20, Esteves also teaches the parameter as a strength of a pilot signal for a broadcast transmission channel as measured at the at least one mobile user device (see col. 4, lines 22-24).

Response to Arguments

3. Applicant's arguments with respect to claims 6-20 and 22-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUGENE YUN whose telephone number is (571)272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571)272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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